of which he gives figures of four interesting species, a new Sylvia nearly allied to S. mexicana, Fringilla leucophrys, Numenius hudsonicus, Lath., 1. N. borealis, Wilson, and Anas Barrowii of Richardson. Then follows a list of the Greenland Fish, accompanied with numerous observations, and with the description of two new genera, which he thus characterizes:

LYCODES.

Corpus elongatum, antice incrassatum, rostro obtuse conico, trunco compresso, cauda ensiformi. Squamæ corporis rotundæ, minutæ, tenuissimæ, cuti immersæ. Os dentibus validis, intermaxillaribus, mandibularibus, vomerinis et palatinis armatum; rictus mediocris. Membrana branchiostega sexradiata utrinque jugulo connata, apertura branchiali angusta postica. Pinnæ ventrales obsoletæ brevissimæ latiusculæ jugulares. Pinna dorsalis et pinna analis longissimæ, apicem caudæ circumdantes; radiis articulatis divisis. Vesica natatoria nulla.

Inter Zoareæum et Anarrhicam genus medium.

1. Lycodes Vahlii. Corpore fasciato, capite postice parum depresso; pinnis, dorsali et anali, squamis minutissimis adspersis, illa radiis 117, hac radiis 93; ano ante medium gastræum sito. (Tab. V.)

Pustulated Blenny, Pennant, Artic. Zool.—Blennius polaris, Sabine.

- 2. Lycodes reticulatus, corpore reticulato; capite postice compressiusculo; pinnis, dorsali analique, nudis, illa radiis 95, hac radiis 75; ano fere in gastræo medio sito. (Tab. VI.)
- 3. Lycodes seminudus, corpore concolore, ab apice oris usque ad angulum anteriorem pinnæ analis nudo; capite postice compressiusculo; pinnis dorsali analique nudis, illa radiis 91, hac 71; ano pone medium gastræum sito.

BYTHITES.

Corpus breve compressum antice incrassatum, ore fere truncato, cauda ensiformi. Squamæ corporis rotundæ minutæ imbricatæ. Linea lateralis tubulis exsertis cutaneis compacta, interrupta. Os dentibus acutis intermaxillaribus, mandibularibus, vomerinis et palatinis armatum; rictus mediocris. Membrana branchiostega utriusque aperturæ invicem connata sub isthmo libere suspensa; radiis octo; apertura ampla inferopostica. Pinnæ ventrales obsoletæ uniradiatæ filiformes longiusculæ jugulares. Pinnæ, dorsalis et analis, longæ, apicem caudæ circumdantes; radiis articulatis divisis. Membrum conicum crassum pone anum horizontaliter porrectum, apice triphyllo papilligero. Vesica natatoria canali pneumatico nullo.

Bythites fuscus. (Tab. VII.)

Ordnance Survey of Ireland. Colonel Colby, R.E. Superintendent. Volume the First, Memoir of the City and North-western Liberties of Londonderry, parish of Templemere. 4to. Dublin. Hodges and Smith. 1837.

We have always considered that a survey of a country, conducted

by properly appointed men, whether its real purport was mere history and statistics, or the ascertaining of the valuation and capabilities of the district for culture and commerce, might also be made most highly important for a knowledge of its natural productions; and from the clear manner in which the contents of the present volume (the first of a series) are made out, with the elaborate detail given to some of the departments, we ventured to expect something of a superior class, and that some portion of the work would come fittingly under our head of 'Bibliographical Notices.' The volume is divided into three parts or sections, the "Natural," "Artificial" and "General" Notes. It is with the first we have to do, divided again into

Natural Features and Natural History.

Hills. Geology.
Lakes. Botany.
Rivers, &c. Zoology.

With this part we are not satisfied. The parish of Templemere is not a very favourable one for displaying the qualifications of a naturalist or for exhibiting what might be done in the records of a local Fauna; the plan pursued is excellent, but it is sadly deficient in detail. We have the "natural features," embracing geology and botany, concisely described, giving a view of the general surface and of the vegetation of the parish. Its botanical riches are not great, not more than fifty species being mentioned as worthy of notice, but some of these would be actively sought after by a botanist accustomed only to the more usual flora of England or Scotland. For zoology the parish is noted to be unfavourable, and undoubtedly it is for a rare or very interesting list; but surely in mammalia Templemere can boast of more than a bat and the otter. The latter is given as the Lutra vulgaris; is it the species common to the Sister isle and the continent of Europe? Seventeen birds are only mentioned, all of them common, if we except one, which, however, we are at some loss to identify, from the remarks which accompany it. No. 11, "Sturnus? vulgaris, or Turdus solitarius;" if the true solitary thrush, as it is called (a Petro cincla), then it is worth recording; if merely a young starling, scarcely so; and Mr. Thompson, of Belfast, or Mr. R. Ball could have at once settled that question, if a reference to the "Ordnance Collections" was inconvenient. The fish are better treated of, though we have only twenty-two species recorded. There are some interesting observations on the genus Scyllium. The list of Mollusca enumerates only Mya arenaria, Turbo littoreus, and Mytilus edulis. In this first part, occupying in all only sixteen

pages, it is stated in conclusion, "that the details will be filled up and completed in the zoological department of the county;" and on this account we should not perhaps have spoken so lightly of it, but we know that there are so many parts of Ireland unexplored that we do feel disappointed. A naturalist should be attached to the survey during all its working and travelling time; the expense would be comparatively small, the information would be great, and without this we can scarcely expect to see the "natural state" brought up to the same standard with the other portions of this great and national undertaking.

At the conclusion of this volume there is appended "Notices," accompanied with plates; these are very important. The Notices are stated to be "published for the more speedy information of men of science, in anticipation of the parochial memoirs, in proper connexion with which the subjects will be ultimately described," and the plates devoted to organic remains and to botany are beautifully executed. This plan is also excellent, and might perhaps be made to supersede entirely any temporary sketch of the natural state of each parish, such as we have just noticed, until the natural history of the whole county was prepared. They might also be so introduced as to form a separate work, detailing the most interesting discoveries among the natural productions of Ireland when the great survey was completed, and thus be more useful and easily accessible to the professed naturalist.

Many of these notices have appeared elsewhere previously, and are chiefly relative to botany and the lower classes of zoology. The plates are three, devoted to fossil remains, the others to Calamagrostis lapponica, Carex Buxbaumii, Polysiphonia atropurpurea, and P. affinis.

The Edinburgh New Philosophical Journal. Conducted by Professor Jameson. No. for January 1838. Edinburgh, A. Black and Co. Svo.

JANUARY 1838. Zoology.

I. Experiments on the development and growth of the fry of the Salmon, from the exclusion of the ovum to the age of seven months. By Mr. John Shaw, Dumlunry, Dumfriesshire. This is one of the most important papers on the subject which has been published since 1800; and although circumstances wherein any animal is to a certain extent artificially placed must be viewed with caution, the experiments now detailed are nearly as perfect as, under the circumstances, they could be. Mr. Shaw was previously known